

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) A leadframe for a radiation-emitting component, comprising:  
a mount part having:
  - at least one wire connecting area;
  - an opening formed therein; and
  - at least one external electrical connecting strip; anda separately manufactured thermal connecting part disposed in said opening and fastened into said mount part, said thermal connecting part having at least one chip mounting area and a reflector well surrounding said chip mounting area.
2. (Previously Presented) The leadframe according to claim 1, wherein said mount part has one of a bracket and an eye into which said thermal connecting part is fastened.
3. (Original) The leadframe according to claim 1, wherein said thermal connecting part and said mount part are connected by at least one of the group consisting of a crimped connection, a riveted connection, a soldered connection, and a welded connection therebetween.
4. (Original) The leadframe according to claim 1, further comprising a connection between said thermal connecting part and said mount part, said connection being at least one of a crimped connection, a riveted connection, a soldered connection, and a welded connection.
5. (Canceled)

6. (Original) The leadframe according to claim 5, wherein said wire connecting area is disposed at a higher level than said chip mounting area as viewed from said chip mounting area.

7. (Original) The leadframe according to claim 6, wherein:  
said reflector well has an edge; and  
said wire connecting area is disposed above said edge as viewed from said chip mounting area.

8. (Original) The leadframe according to claim 5, wherein:  
a chip is to be mounted on said chip mounting area; and  
said reflector well has height no greater than twice a height of the chip.

9. (Currently Amended) The leadframe according to claim 1, A leadframe for a radiation-  
~~emitting component, comprising:~~  
~~a mount part having:~~  
    ~~at least one wire connecting area;~~  
    ~~an opening formed therein; and~~  
    ~~at least one external electrical connecting strip; and~~  
~~a separately manufactured thermal connecting part disposed in said opening and fastened into~~  
~~said mount part,~~ said thermal connecting part having at least one chip mounting area, and  
containing at least one of copper, aluminum, molybdenum, iron, nickel, and tungsten..

10. (Original) The leadframe according to claim 1, wherein said chip mounting area has a surface coating for improving mounting of a chip.

11. (Original) The leadframe according to claim 10, wherein said surface coating is at least one of a silver coating and a gold coating.

12. (Original) The leadframe according to claim 1, wherein said leadframe contains at least one of copper and iron.

13. (Previously Presented) A leadframe for a radiation-emitting component, comprising: a mount part having:

at least one wire connecting area;

an opening formed therein; and

at least one external electrical connecting strip having a surface coating for improving component mounting characteristics; and

a separately manufactured thermal connecting part disposed in said opening and fastened into said mount part, said thermal connecting part having at least one chip mounting area.

14. (Original) The leadframe according to claim 13, said surface coating is a coating selected from at least one of a group consisting of a silver coating, a gold coating, a tin coating, and a zinc coating.

15. (Original) The leadframe according to claim 1, wherein the radiation-emitting component is a light-emitting diode component.

16. (Canceled)

17. (Previously Presented) A housing for light-emitting components, comprising: a leadframe including:

a mount part having:

at least one wire connecting area;

an opening formed therein; and

at least one external electrical connecting strip; and

a separately manufactured thermal connecting part disposed in said opening and fastened into said mount part, said thermal connecting part having at least one chip mounting area; the housing being a surface mounted housing.

18. (Original) The housing according to claim 17, further comprising:  
a housing base body formed from a molding compound;  
said leadframe being embedded in said base body to pass out said connecting strip from said base body, and  
said thermal connecting part having a thermal connecting surface thermally connectable from the outside.

19. (Original) The housing according to claim 18, wherein:  
said base body has a radiation outlet window; and  
said thermal connecting part is embedded in said base body to disposed said chip mounting area in said radiation outlet window.

20. (Original) The housing according to claim 19, wherein said radiation outlet window has side walls in the form of reflector surfaces.

21. (Original) The housing according to claim 19, wherein said radiation outlet window has reflective side walls.

22. (Original) The housing according to claim 20, wherein:  
said thermal connecting part has a reflector well forming a first part of a reflector;  
said side walls of said radiation outlet window form a second part of said reflector; and said well merges to said second part.

23. (Original) The housing according to claim 22, wherein:

a chip is to be mounted on said chip mounting area; and  
an overall height of said reflector is no greater than four times a height of the chip.

24. (Original) The housing according to claim 23, wherein:  
the chip has a main emission direction;  
said reflector well has reflector walls;  
said radiation outlet window has reflector surfaces; and  
said reflector walls and said reflector surfaces are at different angles with respect to the main emission direction.

25. (Original) The housing according to claim 24, wherein an angle between said reflector walls and the main emission direction is greater than an angle between said reflector surfaces and the main emission direction.

26. (Canceled)

27. (Original) The housing according to claim 17, wherein said leadframe is a surface mounted a leadframe.

28. (Currently Amended) A housing for light-emitting components, comprising:

~~a leadframe including:~~

~~a mount part having:~~

~~at least one wire connecting area;~~

~~an opening formed therein; and~~

~~at least one external electrical connecting strip; and~~

~~a separately manufactured thermal connecting part disposed in said opening and fastened into said mount part, said thermal connecting part having at least one chip mounting area;~~

the leadframe according to claim 1.

the light-emitting components being light-emitting diodes.

29. (Canceled)

30. (Currently Amended) A radiation-emitting component, comprising:  
a radiation-emitting chip at least partially sheathed with a radiation-permeable compound; and  
one of:

the leadframe of claim 1; and

~~a leadframe having:~~

~~a mount part having:~~

~~at least one wire connecting area;~~

~~an opening formed therein; and~~

~~at least one external electrical connecting strip; and~~

~~a separately manufactured thermal connecting part disposed in said opening and  
fastened into said mount part, said thermal connecting part having at least one  
chip mounting area; and~~

a housing for light-emitting components having:

the leadframe of claim 1.

~~a leadframe including:~~

~~a mount part having:~~

~~at least one wire connecting area;~~

~~an opening formed therein; and~~

~~at least one external electrical connecting strip; and~~

~~a separately manufactured thermal connecting part disposed in said opening and  
fastened into said mount part, said thermal connecting part having at least one  
chip mounting area.~~

31. (Original) The radiation-emitting component according to claim 30, wherein said chip is a semiconductor chip.

32. (Canceled)

33. (Previously Presented) The radiation-emitting component according to claim 30, wherein said radiation-permeable compound is a plastic compound.

34. (Original) The radiation-emitting component according to claim 33, wherein said plastic compound is one of a casting resin and a molding compound.

35. (Original) The radiation-emitting component according to claim 33, wherein said plastic compound contains at least one of a group consisting of an epoxy resin, an acryl resin, a silicone resin, and a mixture of at least two of said epoxy resin, said acryl resin, and said silicone resin..

36. (Original) The radiation-emitting component according to claim 33, wherein:  
said chip is a semiconductor chip; and  
said radiation-permeable compound has a volume described by the formula  $V \leq q H$ , where H is a height of said chip and q is a scaling factor having a value is less than  $10 \text{ mm}^2$ .

37. (Original) The radiation-emitting component according to claim 36, wherein q is a scaling factor having a value approximately equal to  $7 \text{ mm}^2$ .

38. (Original) The radiation-emitting component according to claim 30, wherein said chip is a semiconductor chip mounted on said chip mounting area of said thermal connecting part.

39. (Original) The radiation-emitting component according to claim 38, wherein said chip is connected to said chip mounting area by one of an adhesive bond and a solder.

40. (Original) The radiation-emitting component according to claim 38, wherein said chip is one of adhesively bonded and soldered to said chip mounting area.

41. (Original) The radiation-emitting component according to claim 39, wherein said chip is mounted on said chip mounting area by a silver solder.

42. (Original) The radiation-emitting component according to claim 41, wherein said silver solder has a melting temperature greater than 260° C.

43. (Original) The radiation-emitting component according to claim 30, further comprising a wire connection electrically conductively connecting said chip to said wire connecting area.

44. (Previously Presented) A method for producing a semiconductor component according to claim 30, which comprises:

providing the mount part;

fastening the thermal connecting part having the chip mounting area into the opening formed in the mount part;

fitting the radiation-emitting chip to the chip mounting area; and

embedding the mount part and the thermal connecting part in a housing molding compound.

45. (Original) The method according to claim 44, which further comprises connecting the thermal connecting part to the mount part by one of riveting, crimping, and soldering.

46. (Original) The method according to claim 44, which further comprises fitting the chip to the chip mounting area before the mount part and the thermal connecting part are embedded in the housing molding compound.



47. (Original) The method according to claim 44, which further comprises soldering the chip to the chip mounting area at a soldering temperature greater than 260° C.

48. (Original) The method according to claim 44, which further comprises mounting the chip on the chip mounting area with a silver solder.

49. (Original) The method according to claim 44, which further comprises embedding the mount part and the thermal connecting part in the housing molding compound by one of injection-molding and injection-compression.

50. (Canceled)

51. (New) The leadframe of claim 1, wherein the thermal connecting part extends through the opening in the mount part and connects to the mount part at the opening to transfer heat away from the mount part.

52. (New) A leadframe for a radiation-emitting component, comprising:

a first electrically conductive component having a mounting region and an electrical connecting strip extending from the mounting region, the mounting region having an opening formed therein; and

a separately manufactured thermal connecting part disposed in the opening of the mounting region and secured to the mounting region to form an electrical connection with the first electrically conductive component, wherein the thermal connecting part comprises at least one chip mounting area and a reflector well surrounding said chip mounting area.

53. (New) The leadframe of claim 52, wherein the thermal connecting part extends through the opening in the mount region and connects to the mount region at the opening to transfer heat away from the mount region.